the aforementioned plan are hereby adopted. Any changes made in the boundaries and accepted by the commissioner shall be considered as automatically adopted for the purposes of this section.

3. On or after the effective date of this section and except as provided herein, no person shall commence operation, including site preparation, of a new landfill or of an expansion to an existing landfill which is located in a deep flow recharge area. However, the commissioner, after conducting a public hearing, may approve a limited expansion of any existing landfill in a deep flow recharge area for the sole purpose of providing for solid waste disposal capacity prior to the implementation of a resource recovery system. The commissioner shall not approve any such expansion unless he finds that the owner of such landfill is a municipality that is implementing a resource recovery system which is acceptable to the commissioner and which will be operational no later than seven years after the effective date of this section and that no other feasible means of solid waste management is available, taking into account technological, economic and other essential factors.

4. On or after the effective date of this section, no person shall commence operation, including site preparation, of a new landfill or of an expansion to an existing landfill, which is located in the county of Nassau or Suffolk outside of deep flow recharge areas unless:

a. The commissioner has made an affirmative determination that such landfill will not pose a threat to groundwater quality; and

b. The owner or operator of the landfill has posted a financial guarantee such as, but not limited to, pollution liability insurance, sureties, performance bonds and/or trust funds acceptable to the commissioner securing the cost of corrective treatment, or the development of alternative water sources, should such landfill become a source of groundwater, surface water, or air pollution. The size of the financial guarantee, the financial stability of the surety, and the terms of posting shall be determined by the commissioner. Financial surety shall also be arranged to ensure the proper operation and maintenance of leachate and other collection and treatment systems for a period of time, as determined by the commissioner, after a landfill is closed; and

c. The landfill is underlain by two or more natural and/or synthetic liners each with provisions for leachate collection, and has a treatment and disposal system, all of which are approved by the commissioner. Any natural clay liners shall have a maximum compacted thickness of two feet and all liners shall have a maximum hydraulic conductivity not to exceed one times ten to the minus seven centimeters per second. If the landfill uses two synthetic liners, the department shall require that the liners are of different chemical compositions; and

d. The landfill is designed and operated to minimize the migration of methane gas or other gases beyond the facility boundaries so as to avert the creation of a nuisance or a danger to property or public health; and

e. The landfill is prohibited from accepting industrial commercial or institutional solid or liquid waste that is hazardous; and